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Education Summary

A SEMI-MONTHLY REPORT ON NEW DEVELOPMENTS, TRENDS, IDEAS, AND RESEARCH IN EDUCATION

• *Trends and Issues*

A contract that would renew itself automatically each year has been proposed for school superintendents in Rhode Island. If details can be worked out, the legislature will be asked to make it a matter of law.

The idea grew out of the recent firings of two superintendents in the state and the attempted firing of a third last month. Alarmed, the state department of education asked members of the NEA's Committee on Tenure and Academic Freedom to confer with representatives of the state school board and superintendents associations. The outcome was a policy statement to which all parties agreed in principle. It contained these elements:

1. Superintendents shall be hired on a contractual basis, with the first contract to run for at least two years.

2. The second contract shall run for four or five years. But after each year of satisfactory service rendered, the contract automatically extends itself an additional year. The superintendent can assume his services have been satisfactory if the board has not notified him to the contrary before the anniversary date of the contract.

The school board is also guaranteed its right to dismiss a superintendent for "just and proper cause" — but exactly what that means remains to be determined. If the school board association finds its membership willing to go along with the general idea of a continuing contract, then a committee of superintendents and school board members will attempt to spell out a workable definition of the phrase. If they succeed, and the state department still approves, the plan will be presented to the legislature.

Expect an official statement from the National Council of Churches (Protestant) some time in the months ahead. It will deal with the question: How should the public schools deal with religion? Catholics and Jews already have raised their official voices on the question. Where the Protestants have spoken so far, it has been without unity among the various denominations. Now the Council is circulating a preliminary statement among the major sects which may lead to something like a united front. In its present form, the statement urges public schools to use their influence to promote the "basic view of life" that "God is, and that he is the creator and sustainer of human life and of all its precious values." While obviously this would conflict with the beliefs of atheists and others, the statement says it is "practically impossible for the schools to remain neutral on the question of God's existence. But beyond this simple affirmation, the public schools probably cannot go, the statement warns. "The public schools cannot corporately be committed to the Christian God."

It isn't final yet, but it's understood that Dr. James B. Conant, who has just completed a study of the American high school, may soon embark on a foundation-sponsored study of the American elementary school. What he'll look for, and how and where are among the details that remain to be decided. Dr. Conant has been in Europe, and on his return many of the details will be solidified. An announcement is expected from his office at the end of this month.

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● Administration

Should students be given a part in administrative affairs? And if so, can they be given one without reducing the over-all efficiency? These questions were asked at the 14th National Conference on Higher Education in Chicago, March 1-4, and they received some surprisingly liberal answers. While the answers were made with reference to college students, some of them could possibly apply to secondary school students.

Ferrel Heady, Professor of Political Science at the University of Michigan, argued that students should have some say in administrative affairs. Since the schools exist for students, he pointed out, students have a legitimate interest in almost everything that goes on in them. At the least, he said, students should have a chance to inform themselves and to express their opinions on such matters as quality of course content and teaching, student discipline, recognition of student organizations, intramural athletics and other extracurricular activities.

For efficient student-administration relationships, Prof. Heady said, there should be an elected student council, or similar organization. This group would represent the student body in dealings with the administration. Also, the council should have a number of subdepartments for particular purposes, such as handling disciplinary cases.

Any power delegated to the student council should be "clearly and officially set forth, and should be faithfully honored" as long as it is in effect. Failure to do so, Prof. Heady says, can be disastrous to student morale and to student-administration relationships.

Another speaker, Harry H. Lunn, Jr., former President of the United States National Student Assn., added this: A more aggressive student leadership could do much toward strengthening the curriculum, raising performance standards, and making extracurricular activity more educational.

CURRENT READING OF SPECIAL INTEREST

Elementary School Administration and Supervision *by Willard S. Elsbree and Harold J. McNally (revised). American Book Co., 55 Fifth Ave., New York 3. 551 pp. $6. (Brought up to date after eight years, this text discusses the principalship, organizing and supervising the instructional program, school-community relations, administering funds and facilities.)*

● Teaching Methods

A "teaching machine" developed at Harvard is attracting wide attention in educational circles. It has been used in several reportedly successful experiments, and last month the Ford Foundation awarded a $204,000 grant to Hamilton College, N. Y., for development of teaching materials to be used with it.

The machine in question, one of several of its kind, was invented by Prof. B. Frederick Skinner of the Harvard psychology department. It is a self-teaching device designed to cut down the time a teacher needs to spend with a pupil.

There are several variations on Prof. Skinner's machine, but basically it is a smallish box equipped with a lever on one side and a pair of windows on top. In one window a question appears. In the other is a paper strip on which the student writes his answer. Moving the lever then moves the written answer under a transparent shield where it can still be seen but not altered. At the same time the correct answer appears in the first window. The student then grades himself with a check or cross and goes on to the next question. In some of the more complicated variations, an incorrect answer will signal the machine to repeat the question later.

The heart of the machine is the questions it asks and the order in which they are presented. Ideally, one question should lead to the next, so that the student who is able to answer the first question thereby gains enough knowledge to answer the second, and so on. Texts and lectures would supplement what the student learns from the machine. The Ford grant is to be used by Hamilton to develop materials for teaching logic, math, psychology, French and German.

CURRENT READING OF SPECIAL INTEREST

Teaching in the Nursery School *by Sallie Beth Moore and Phyllis Richards. Harper & Brothers, 49 East 33rd St., New York 16. 534pp. $5.50 (A text devoted entirely to teaching the preschool child, with heavy emphasis on the nursery teacher's relationships with parents, the community, other teachers and school personnel.)*

● The Profession

Plain talk is most easily understood, and educators should use more of it, writes James Michael Lee in *The Clearing House* for March. "Educators today abound in ideas," he says, "but neglect to utilize the skills necessary to transfer their ideas to others. They would do well to seek less glory and begin to pay more attention to the dynamics of successful communication."

The importance of successful communication becomes apparent when the educator faces the problem of making himself understood by his critics – who often are the men in the streets. And when he uses jargon – perhaps a phrase like "employing a channel of oral intercommunication" as a substitute for the word "talking" – then he has little chance of getting his ideas across.

Mr. Lee says educators make five major misuses of words in their speech and writings. They use jargon, or "pedagese" (as described in the previous paragraph). They constantly use "emotionally colored" words or phrases, either to condemn their opponents or to praise themselves. Examples: "authoritarian," "narrow-minded," "inflexible," for the opponents, and "modern," "flexible," "broad-minded" for themselves. Users of these words tend to divide the world into blacks and whites, instead of the more realistic gray.

A third misuse is the tendency to make verbs out of nouns in an attempt to inject something dynamic

. . . AND A WORD ABOUT THAT SPEECH

"As speech has become an end in itself, we have come increasingly to concentrate our energies on the magnificence, or anyhow the grandiloquence, of expression. We live in the era of the memorable speech. If a man cannot be practical, he at least can be memorable. I could perhaps enlarge on the components of the memorable speech. Its principal ingredients are fanciful exaggeration, foolish prophecy and silly heroics in about that order of importance, although in recent years there has been increasing resort to extreme piety."

— John Kenneth Galbraith, Harvard University (in a recent speech)

into speech and writing. Examples: "goaling," "purposing," "intellectualizing." Another misuse is the repetition of trite educational words and phrases like "creative educator," "dynamic educational leader," and "continuous and continuing evaluation." A fifth is the constant use of "key words" like "experience," "equal," and "kinds of" (as "kinds of educational experiences").

● *School Plant*

Stumbling blocks to new school construction in a given community are many and low lying, says Thomas D. Bailey, State Superintendent of Education in Florida. In a recent speech he listed some of those that have to be hurdled or skirted before a building program can get off the ground.

1. The "provincials." This is the element in the population that thinks, "because the old building was good enough for me, it ought to be good enough for them."
2. The "debt-free philosophers." These are the people who oppose any measure that puts the community in debt for any purpose — and take pride in doing so.
3. The "do-nothings." These are the ones who believe in education, but because of apathy don't bother to vote their convictions.

These attitudes, and others, tend to cement still other stumbling blocks, which Mr. Bailey says include low-assessed valuations; too-small school districts; and politics-playing school board members.

● *The Learner*

If plagiarism's a problem, Leo Hamalian of the City College of New York has several suggestions for dealing with it. In the February *College Composition and Communication,* he says a student generally will hand in another's theme or term paper as his own for one of these reasons:

The student, by not properly budgeting his time, leaves the paper until the last minute. Finding he cannot finish it on time, he is practically forced to take desperate measures. *Solution*: Give the student who asks for it an extension of the deadline without any penalty. This "so disorganizes and flabbergasts the student, who thinks of his teachers as marking machines, that he often plays it straight."

Even the systematic student might slip into plagiarism when his choice of topic is limited and outside his interests. *Solution*: Soon after the first class discussion of themes or term papers, require the student to hand in a list of three topics, in order of preference, about which he has some curiosity. Then assign him one of these topics. If all are unsuitable, or if the necessary research will be too difficult, the teacher and the student can work out a topic based on the interests he has suggested.

Some students will plagiarize because of hostilities toward the teacher, or because they just don't care. *Solution*: a talk with the student to convince him that no one's out "to get" him. Then put him on a specific topic that all but eliminates the possibility of plagiarism — and even induces the possibility of genuine "discovery." (Example: Who lived two hundred years ago where his home now stands?)

Some other devices: Define the practice of plagiarism clearly. And require the student to turn in his notes and drafts with his final paper.

● *Reading*

A new reading center at Woodrow Wilson Junior High School in Decatur, Ill., is sparking a reading development program which involves every student and teacher in the school.

The center itself is a bright and cheerful room equipped with 16 booths containing reading-pacers. Each of the 500 students visits the center one day a week and selects his own practice reading from the well-stocked bookshelf in each booth. There are 36 student desks, many reference materials, several dictionaries, encyclopedias, an atlas, a tachistoscope and other projection devices.

The center maintains its own circulating library, which operates independently of the school library — and without the limitations of "due dates." Students thus are encouraged to borrow a book which they might not be able to read in a week or two. This, in turn, stimulates greater use of the school library.

Each teacher takes a turn at assisting Mrs. Margarethe F. Livesay, the reading counselor. Thus all teachers learn what's being done in the center, so they can carry on the program in their classrooms. And by assisting the reading counselor, any teacher who is unsure of the techniques of teaching reading gets a chance to brush up.

After a year and a half, test results show the pupils gaining in rate, vocabulary and comprehension. Results are so encouraging, in fact, that another junior high school in Decatur has set up a center, and several others have programs under study.

182 Free In-Service Institutes for Science and Math T

For the third consecutive year, the National Science Foundation in 1959-60 will sponsor a series of in-service institutes for secondary school math and science teachers. These will be held at the colleges and universities listed below, and outside of regular school hours so that teachers may attend while still teaching full time in their schools. Requests for information and application forms should be addressed to the professors in charge of the institutes — not to the National Science Foundation. The professors' names also appear below. The letters following the names of the colleges indicate the type of courses which will be offered: M - math; PS - physical sciences; ES - earth sciences; BS - biological sciences.

ALABAMA
Alabama College (BS, PS)
Montevallo, Alabama
Paul C. Bailey, *Dept of Biology*
University of Alabama (M, BS, PS)
University, Alabama
Ralph L. Chermock, *Dept of Biology*

ARIZONA
Arizona State University (BS, PS, M, ES)
Tempe, Arizona
Alan T. Wager, *Dept. of Physics*
University of Arizona (BS, M)
Tucson, Arizona
Robert W. Hoshaw, *Dept. of Botany*

CALIFORNIA
University of California (M)
Los Angeles 24, California
(San Bernardino Area)
Clifford Bell, *Dept. of Mathematics and Physical Sciences Extension*
University of California (M)
Los Angeles 24, California
(Los Angeles Area)
Clifford Bell, *Dept. of Mathematics and Physical Sciences Extension*
University of California (PS)
Los Angeles 24, California
Paul S. Farrington, *Dept. of Chemistry*
University of California (PS)
Los Angeles 24, California
Norman A. Watson, *Dept. of Physics*
Immaculate Heart College (PS)
Los Angeles 27, California
Sister Agnes Ann Green, *Division of Science*
Long Beach State College (BS)
Long Beach, California
Philip E. Hildreth, *Dept. of Natural Science*
College of the Pacific (BS, PS)
Stockton, California
Emerson G. Cobb, *Dept. of Chemistry*
University of Redlands (BS, PS)
Redlands, California
Robert H. Maybury, *Dept. of Chemistry*
Sacramento State College (M)
Sacramento 19, California
H. Stewart Moredock, *Dept. of Mathematics*
San Jose State College (PS)
San Jose 14, California
Ralph Fessenden, *Dept. of Chemistry*
San Jose State College (M)
San Jose 14, California
James R. Smart, *Dept. of Mathematics*
University of Santa Clara (M)
Santa Clara, California
Irving Sussman, *Dept. of Mathematics*

COLORADO
Colorado State College (M)
Greeley, Colorado
Harley F. Glidden, *Division of Science*
Colorado State College (BS)
Greeley, Colorado
Harley F. Glidden, *Division of Science*
Colorado State College (ES)
Greeley, Colorado
Harley F. Glidden, *Division of Science*
Colorado State University (M)
Fort Collins, Colorado
M. Leslie Madison, *Dept. of Mathematics*
University of Colorado (M)
Boulder, Colorado
William E. Briggs, *Dept. of Mathematics*

CONNECTICUT
University of Connecticut (BS, PS, ES)
Storrs, Connecticut
David J. Blick, *Dept. of Science Education*
Yale University (BS, M)
New Haven, Connecticut
Stuart R. Brinkley, *Dept. of Chemistry*

DELAWARE
University of Delaware (M)
Newark, Delaware
G. Cuthbert Webber, *Dept. of Mathematics*

FLORIDA
Florida State University (M)
Tallahassee, Florida
E. P. Miles, Jr., *Dept. of Mathematics*
Florida State University (PS)
Tallahassee, Florida
J. Stanley Marshall, *Dept. of Science Education*
University of Miami (M)
Miami, Florida
W. L. Strother, *Dept. of Mathematics*

GEORGIA
Emory University (BS, PS, M, ES)
Atlanta 22, Georgia
Floyd Jordon, *Atlanta Area Teacher Education Service*
Shorter College (BS, PS, M, ES)
Rome, Georgia
Julian Darlington, *Dept. of Biology*

ILLINOIS
Illinois College (M, PS)
Jacksonville, Illinois
Arthur E. Hallerberg, *Dept. of Mathematics*
Illinois Institute of Technology (BS, PS, M)
Chicago 16, Illinois
Haim Reingold, *Dept. of Mathematics*
Knox College (PS)
Galesburg, Illinois
Herbert Priestley, *Dept. of Physics*
Lake Forest College (PS)
Lake Forest, Illinois
H. C. Jensen, *Dept. of Physics*
Northern Illinois University (BS)
DeKalb, Illinois
George L. Terwilliger, *Dept. of Bio. Sciences*
Northwestern University (M)
Evanston, Illinois
E. H. C. Hildebrandt, *Dept. of Mathematics*
St. Xavier College (PS)
Chicago 43, Illinois
K. Lucille McCluskey, *Dept. of Chemistry*

INDIANA
Ball State Teachers College (M)
Muncie, Indiana
Charles Brumfiel, *Dept. of Mathematics*
Butler University (BS, PS)
Indianapolis, Indiana
Ralph K. Birdwhistell, *Dept. of Chemistry*
Evansville College (M)
Evansville 4, Indiana
Ralph H. Coleman, *Dept. of Mathematics*
Indiana Central College (BS, PS, M, ES)
Indianapolis 27, Indiana
Robert M. Brooker, *Dept. of Chemistry*
Indiana State Teachers College (PS, ES)
Terre Haute, Indiana
John C. Hook, *Dept. of Science*
Indiana University (M)
Bloomington, Indiana
J. W. T. Youngs, *Dept. of Mathematics*
Marian College (M)
Indianapolis 22, Indiana
Sister Gertrude Marie, O.S.F., *Dept. of Math.*
Purdue University (M)
Lafayette, Indiana
Gerhard N. Wollan, *Dept. of Mathematics*

IOWA
Drake University (BS, PS, ES)
Des Moines 11, Iowa
Earle L. Canfield, *Dept. of Mathematics*

KANSAS
Kansas State College (M)
Manhattan, Kansas
R. G. Sanger, *Dept. of Mathematics*
Kansas State Teachers College (BS, PS, M)
Emporia, Kansas
Ted F. Andrews, *Dept. of Biology*
Kansas State Teachers College (BS, M)
Pittsburg, Kansas
R. G. Smith, *Dept. of Mathematics*

KENTUCKY
University of Louisville (M)
Louisville 8, Kentucky
W. H. Spragens, *Dept. of Mathematics*
Murray State College (BS, PS, M)
Murray, Kentucky
A. M. Wolfson, *Dept. of Biology*
Western Kentucky State College (PS, M)
Bowling Green, Kentucky
Ward C. Sumpter, *Dept. of Chemistry*

LOUISIANA
Louisiana State University (M)
Baton Rouge, 3, Louisiana
Henry G. Jacob, *Dept. of Mathematics*
Southern University and A. & M. College (BS, PS, M)
Baton Rouge, Louisiana
Lafayette Frederick, *Dept. of Biology*
Southwestern Louisiana Institute (BS, PS, M)
Lafayette, Louisiana
James R. Oliver, *Dept. of Chemistry*

MAINE
Bowdoin College (M)
Brunswick, Maine
Richard L. Chittim, *Dept. of Mathematics*

MARYLAND
Johns Hopkins University (ES)
Baltimore 18, Maryland
George S. Benton, *Dept. of Civil Engineering and Geography*
University of Maryland (PS)
College Park, Maryland
Howard Laster, *Dept. of Physics*

MASSACHUSETTS
Boston College (M)
Chestnut Hill 67, Massachusetts
Rev. Stanley Bezuszka, S.J., *Dept. of Mathematics*
College of the Holy Cross (M)
Worcester 10, Massachusetts
Rev. Raymond J. Swords, S.J., *Dept. of Mathematics*
Massachusetts State Teachers College (BS, PS, M)
Salem, Massachusetts
Thomas I. Ryan, *Dept. of Science*
University of Massachusetts (BS, PS, M)
Amherst, Massachusetts
Robert W. Wagner, *Dept. of Mathematics*
Williams College (M)
Williamstown, Massachusetts
Donald E. Richmond, *Dept. of Mathematics*
Worcester Polytechnic Institute (BS, PS)
Worcester 9, Massachusetts
John C. Johnson, *Dept. of Physics*

MICHIGAN
Central Michigan College (M)
Mt. Pleasant, Michigan
Lauren G. Woodby, *Dept. of Mathematics*
University of Detroit (M)
Detroit 21, Michigan
Lyle E. Mehlenbacher, *Dept. of Mathematics*
Eastern Michigan College (PS)
Ypsilanti, Michigan
James M. Barnes, *Dept. of Physics & Astronomy*
Marygrove College (PS)
Detroit 21, Michigan
George E. F. Brewer, *Dept. of Chemistry*
Michigan State University (BS, M)
East Lansing, Michigan
F. B. Dutton, *Dept. of Science & Math.*
Wayne State University (BS)
Detroit 2, Michigan
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Wayne State University (M)
Detroit 2, Michigan
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Western Michigan University (ES)
Kalamazoo, Michigan
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MINNESOTA
Concordia College (BS, PS, M)
Moorhead, Minnesota
Carl L. Bailey, *Dept. of Physics*
College of St. Benedict (PS, M)
St. Joseph, Minnesota
Sister Joanne Muggli, O.S.B., *Dept. of Math.*
College of St. Thomas (PS)
St. Paul 1, Minnesota
Martin Allen, *Dept. of Chemistry*

MISSISSIPPI
Mississippi College (BS, PS, M)
Clinton, Mississippi
Archie H. Germany, *Dept. of Chemistry*
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University, Mississippi
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Tougaloo, Mississippi
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MISSOURI
Missouri Botanical Garden (BS)
St. Louis 10, Missouri
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Missouri School of Mines and Metallurgy (PS, M)
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St. Louis 3, Missouri
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Washington University (PS)
St. Louis 5, Missouri
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William Jewell College (PS, BS)
Liberty, Missouri
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NEW HAMPSHIRE
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Hanover, New Hampshire
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Montclair, New Jersey
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Emory P. Starke, *Dept of Mathematics*

Rutgers — The State University (ES)
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William Goodwin, *Dept. of Geography*
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NEW YORK
The University of Buffalo (M)
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Columbia University Teachers College (M)
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New York University (M)
New York 3, New York
Wilhelm Magnus, *Dept. of Mathematics*
New York University (ES)
New York 3, New York
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New York 38, New York
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Syracuse 10, New York
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Yeshiva University (M)
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NORTH CAROLINA
North Carolina State College (M)
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Woman's College of the University of North Carolina (BS, PS, M, ES)
Greensboro, North Carolina
Hollis J. Rogers, *Dept. of Biology*

OHIO
The University of Akron (M, PS)
Akron 4, Ohio
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Antioch College (BS, PS, M, ES)
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Bowling Green, Ohio
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Case Institute of Technology (PS)
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Cincinnati 7, Ohio
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OKLAHOMA
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Oklahoma State University (PS)
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University of Oklahoma (BS, PS, M)
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Durant, Oklahoma
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OREGON
Marylhurst College (BS, M)
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University of Oregon (M)
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Reed College (PS, M)
Portland 2, Oregon
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Reading, Pennsylvania
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Bryn Mawr College (PS)
Bryn Mawr, Pennsylvania
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Bucknell University (M)
Lewisburg, Pennsylvania
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Geneva College (M, PS)
Beaver Falls, Pennsylvania
Forrest E. Justis, *Dept. of Mathematics*
Immaculata College (PS)
Immaculata, Pennsylvania
Sister Maria Socorro, *Dept. of Physics*
Lincoln University (M, PS, ES)
Lincoln University, Pennsylvania
Leroy D. Johnson, *Dept. of Chemistry*
Mount Mercy College (BS)
Pittsburgh 13, Pennsylvania
William A. Uricchio, *Dept. of Biology*
Mount Mercy College (M)
Pittsburgh 13, Pennsylvania
Sister M. Michael Rowland, R.S.M., *Dept. of Mathematics*
Pennsylvania State University (BS, M, PS)
University Park, Pennsylvania
William H. Powers, *Dept. of Chemistry*
University of Pennsylvania (PS, M)
Philadelphia 4, Pennsylvania
J. F. Hazel, *Dept. of Chemistry*
University of Pittsburgh (BS, M, PS)
Pittsburgh 13, Pennsylvania
John C. Knipp, *Dept. of Mathematics*
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Scranton 10, Pennsylvania
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The University of Scranton (M)
Scranton 10, Pennsylvania
Rev. Joseph A. Rock, S.J., *Dean Evening Sessions*
Temple University (PS)
Philadelphia 22, Pennsylvania
Leonard Muldawer, *Dept. of Physics*
Villanova University (BS, PS, M, ES)
Villanova, Pennsylvania
Rev. J. Bernard Hubbert, O.S.A., *Dept of Physics*
Wilkes College (M)
Wilkes-Barre, Pennsylvania
Thomas R. Richards, *Dept. of Mathematics*

RHODE ISLAND
Brown University (BS)
Providence, Rhode Island
Elmer R. Smith, *Dept. of Education*

SOUTH DAKOTA
South Dakota State College (BS, PS, M)
Brookings, South Dakota
Kenneth E. Howard, *Dept. of Chemistry*
State University of South Dakota (PS)
Vermillion, South Dakota
Theodore L. Reid, *Dept. of Chemistry*

TENNESSEE
University of Chattanooga (BS, M)
Chattanooga, Tennessee
Charles W. Whitworth, *Chattanooga College*
Fisk University (BS)
Nashville 8, Tennessee
Edward L. Maxwell, *Dept. of Biology*
Knoxville College (BS, M, PS)
Knoxville, Tennessee
Robert H. Harvey, *Dept. of Mathematics*
Middle Tennessee State College (BS, PS)
Murfreesboro, Tennessee
J. Eldred Wiser, *Dept. of Science*
Southwestern at Memphis (M)
Memphis 12, Tennessee
M. L. MacQueen, *Dept. of Mathematics*
Tennessee A. & I. State University (M)
Nashville, Tennessee
William N. Jackson, *Dept. of Science Education*
Tennessee Polytechnic Institute (BS, PS, M)
Cookeville, Tennessee
G. B. Pennebaker, *Dept. of Biology*

TEXAS
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Waco, Texas
Bryce C. Brown, *Dept. of Biology*
Bishop College (BS, PS, M)
Marshall, Texas
V. N. Likhite, *Dept. of Natural Science and Mathematics*
East Texas State College (M)
Commerce, Texas
Roy N. Jervis, *Dept. of Biology*
East Texas State College (BS)
Commerce, Texas
Roy N. Jervis, *Dept. of Biology*
East Texas State College (PS)
Commerce, Texas
Roy N. Jervis, *Dept. of Biology*
East Texas State College (ES)
Commerce, Texas
Roy N. Jervis, *Dept. of Biology*
Incarnate Word College (BS, PS)
San Antonio 9, Texas
Sister Joseph Marie, C.C.V.I., *Dept. of Biology*
North Texas State College (BS)
Denton, Texas
Robert C. Sherman, *Dept. of Biology*
Pan American College (M)
Edinburg, Texas
Sidney S. Draeger, *Dept. of Mathematics*
Prairie View A. & M. College (BS, PS, M)
Prairie View, Texas
E. E. O'Banion, *Dept. of Natural Science and Chemistry*
Southern Methodist University (BS)
Dallas 5, Texas
John L. McCarthy, *Dept. of Biology*

UTAH
Brigham Young University (PS)
Provo, Utah
Reed M. Izatt, *Dept. of Chemistry*
Utah State University (M)
Logan, Utah
Joe Elich, *Dept. of Mathematics*
University of Utah (M)
Salt Lake City, Utah
E. Allen Davis, *Dept. of Mathematics*

VERMONT
Lyndon Teachers College (M)
Lyndon Center, Vermont
Joseph C. Paige, *Dept. of Science & Mathematics*

VIRGINIA
Bridgewater College (BS, PS, M)
Bridgewater, Virginia
Harry G. M. Jopson, *Dept. of Biology*
Hampton Institute (PS, M)
Hampton, Virginia
F. D. Inge, *Dept. of Natural Sciences*
Virginia Polytechnic Institute (BS, PS, M)
Blacksburg, Virginia
Robert C. Krug, *Dept. of Chemistry*
University of Virginia (M)
(Fisherville Center) Charlottesville, Virginia
William C. Lowry, *Dept. of Mathematics Education*
University of Virginia (BS)
(Roanoke Center) Charlottesville, Virginia
James N. Dent, *Dept. of Biology*
University of Virginia (M)
(Front Royal Center) Charlottesville, Virginia
William C. Lowry, *Dept. of Mathematics Education*
University of Virginia (PS)
(Northern Center) Charlottesville, Virginia
James W. Cole, Jr., *Dept. of Chemistry*
University of Virginia (ES)
(Lynchburg Center) Charlottesville, Virginia
Raymond S. Edmundson, *Dept. of Geology*

WASHINGTON
Whitman College (PS, M)
Walla Walla, Washington
Glenn J. Woodward, *Dept. of Chemistry*

WEST VIRGINIA
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Bethany, West Virginia
John D. Draper, *Dept. of Chemistry*
Concord College (M)
Athens, West Virginia
Harry L. Phillips, *Dept. of Physics and Mathematics*

WISCONSIN
Marquette University (PS)
Milwaukee 3, Wisconsin
John G. Surak, *Dept. of Chemistry*
Milwaukee School of Engineering (PS)
Milwaukee, Wisconsin
Russell H. Isaacson, *Registrar*
Milwaukee School of Engineering (M)
Milwaukee, Wisconsin
Russell H. Isaacson, *Registrar*
Northland College (BS, PS, M)
Ashland, Wisconsin
Dean Jesse M. Caskey
St. Norbert College (M)
West De Pere, Wisconsin
Rev. Robert Sromovsky, O. Praem., *Dept. of Mathematics*

DISTRICT OF COLUMBIA
The American University (BS, PS, M, ES)
Washington 16, D. C.
Leo Schubert, *Dept of Chemistry*
The George Washington University (BS)
Washington 6, D. C.
Russell B. Stevens, *Dept. of Botany*

HAWAII
University of Hawaii (BS, M)
Honolulu 14, Hawaii
Jimmie B. Smith, *Dept. of Botany*

PUERTO RICO
University of Puerto Rico (BS, PS, M)
Mayaguez, Puerto Rico
Virgilio Biaggi, Jr., *Dept. of Biology*

● *Guidance*

A 100-page guide to local jobs is a new guidance tool in the Pittsburgh (Pa.) Public Schools. Entitled *Work Opportunities in Greater Pittsburgh*, the publication is the product of a year and a half of research by the guidance department.

The book discusses working conditions, salaries, and opportunities for advancement in nearly every occupational and professional field in the Pittsburgh area. Specifically covered are the engineering, scientific, medical, legal and teaching professions; as well as skilled, semiskilled and unskilled work fields. Some of its chapters deal with transportation, communications, governmental agencies and public utilities. A bibliography is included, as are discussions of local and national employment trends.

The book will be used as a classroom text, and will be distributed to libraries and guidance counselors in 45 school districts. A second printing, to make it more widely available, is contemplated. A committee headed by Oscar J. Schwarm, Director of Guidance and Child Accounting in the Pittsburgh Public Schools, prepared the book after interviews with specialists in many fields.

● *Science Education*

The nation's science teachers can have a voice in the development of better laboratory equipment for use in the nation's schools. A teacher, or group of teachers, can spot a much-needed improvement, outline it to an interested university-connected scientist — and hope he'll be persuaded to apply for a National Science Foundation grant to develop it. The NSF has just announced a new series of grants for this purpose, but almost none but university people can get them. By working through the universities, though, public school teachers can get their ideas across.

● *Adult Education*

Does the community look at adult education as an extra expense — or as a necessary part of the total school program? If the latter, then financing adult education is no special problem, says Henry M. Gunn, Superintendent of the Palo Alto (Calif.) Unified School District. If the former, he adds, then sound public relations and wise board policies can change their point of view. Here are some suggested guidelines:

1. There should be a written policy on the role of adult education in the community. This should grow out of a careful look into the problems of adult education and out of consultations with many members of the community. Good practice would be to have a citizens advisory committee. The policy should be specific, yet broad enough so that new courses can be added easily and without long debate.

2. The board should have a policy on the amount of money to be earmarked for adult education. (The amount could be expressed as a millage figure or as a percentage of the total budget.) This stabilizes the program and gives the superintendent a firm working guide.

3. The board should have a policy on salaries for the adult education staff. Salaries should be in proportion to the salaries of other employees, and a pay increase for the general teaching staff should include the adult education staff.

4. The board should have a policy on fees — or the lack of them. Some members of the community may feel the adult education program should be entirely tax-supported. Others will expect to pay — and will feel they should. The board can sound out public opinion in consultations with its advisory committee.

CURRENT READING OF SPECIAL INTEREST

Program Materials for Liberal Adult Education, 1959. *The Fund for Adult Education, 200 Bloomingdale Road, White Plains, N. Y. 8pp. (A list of study materials and teachers' guides available from the Fund at nominal cost. Lists materials on modern painting, the humanities, politics and government, economics, parenthood, legal justice.)*

● *Student Activities*

Controlling the parking of student cars on or near school grounds is a problem confronting more and more school systems. To find out how others are handling the problem, Principal Harold Mack of Laramie (Wyo.) High School recently queried 132 school systems in 31 states. On the average, he found, nearly 17 per cent of the students drive to school. Most of the schools provide parking lots, and about half of those that do also provide some supervision. Here are some of the specific controls Mr. Mack learned about:

- Livingston (Calif.) High School requires that all cars driven to school must pass a safety check by the school safety club.
- Dover, Del., assigns a specific parking space to each student, and a student council patrol enforces driving regulations. Violators can be barred from driving on school grounds for the rest of the school year.
- At Henry C. Conrad High School in Wilmington, Del., a student traffic court conducts hearings and penalizes all violators.
- Grand Island (Neb.) High School issues two differently colored stickers: one for students who are permitted to go home for lunch at noon; the other for those who must leave their cars in the lot all day. Custodians supervise the lot during the noon hour.
- Chatham (N.J.) Senior High believes that students should walk to school as a health measure. Hence, only 12 driving permits have been issued to a student body of 652. These were for students who need a car to get to an afterschool job and for athletes who live more than three miles from school.

Needed: A Balanced Educational Policy

By Dr. Earl J. McGrath

Former U. S. Commissioner of Education

Why is the educational enterprise in a sickly condition when most other features of our economic and social life have been in such relative good health?

Many factors are at work in this complex situation. One, however, not so obvious as others, is the general view that the doctrine of state and local control of education implies no studying, planning or financing at the national level. The broad principle that education is a state and local matter, sound enough in its proper context, has actually become an obstruction to the necessary consideration of an adequate program for American education.

Indeed, the thoughtless mouthing of this idea and its deliberate use as a bogey in public discussions of the responsibility of the Government for education largely explain the present halting efforts to come to grips with educational problems on a national scale. If there had been the same lack of governmental concern for the military, business, labor, agricultural, maritime and aviation affairs of the Nation as there has been for education, our national posture would be weak indeed.

All the heated discussion about whether the Federal Government should take responsibility for education is merely rhetoric. The Government has played a part in education from the earliest days of the republic. The small initial grants have increased enormously through the years, to the point where the total now runs into billions of dollars scattered unnoticed through virtually every branch of the Federal structure. The national welfare now demands even greater expenditures. No one in Government or outside knows how much.

Before added subventions are provided for education, the present meaningless patchwork of Federal aid ought to be replaced by a design developed upon a clearly conceived philosophy. A comprehensive Federal policy on education is imperatively needed.

Millions of dollars have been appropriated for hearings, some in the most recent session of the Congress, on one or another educational program which the Government has been asked to support. Thousands of pages of congressional publications record these discussions. Even the casual reader will observe, however, that in the main, these discussions have not dealt with fundamental matters — with policy — but rather with the relative merits of special projects under consideration.

The 86th Congress could do nothing more instrumental in advancing American education than to appropriate a sum of money for hearings and other appropriate activities concerned with the development of an unequivocal and firm Federal policy in respect to education.

These hearings should not be concerned with such matters as whether the Federal Government should provide more or less support for vocational education, for education by television, for school lunch programs, for military education in the colleges. Instead, such broad subjects should be considered as the condition of education in the United States, and the responsibility which the Federal Government ought to assume in connection with current and future educational problems so closely connected with our welfare and destiny as a people.

Leaders in the educational profession, and outside it, should have an opportunity to express their views on public policy; views which, under the present circumstances surrounding such hearings, are often neglected, suppressed, or disguised in behalf of the special interests of the moment. With skillful direction, such public discussions should lead to the shaping of a comprehensive and stable Federal educational policy. A statement of such policy, unmistakable in intent and unequivocal in language, should serve as a guide to the legislative, executive and judicial branches of the Government and instruct our people generally in regard to the things which the Government should or should not be expected to do in the field of education.

If this were done, pressure groups for special educational projects would in the future be required to defend their requests in terms of large national policies rather than their own special concerns. And special interest lobby groups which oppose any Federal aid for any form of education would be required to face the larger implications of their position in terms of the general welfare of the Nation. They would be forced to raise the discussion above the type of debate on detailed figures which has been the refuge of those who will choose any alternative to that of increasing Federal expenditures for education.

The development of a national policy would also provide the basis for a reappraisal of the present large governmental expenditures for education as well as for evaluation of the many new proposals annually urged upon the administration and Congress. The present interest in education, excited by the launching of the satellites, guarantees a strong, affirmative support for such an effort. As a by-product, the responsibilities of state and local governments would simultaneously be clarified.

In addition, such hearings would highlight the further responsibilities which individuals, corporations, alumni groups and professional organizations may be expected to assume if private interest and support of education, especially at the higher levels, is to continue to be a significant feature of American education. If these things could be accomplished, recent scientific developments in Russia would have assisted indirectly in the improvement of American education.

— Reprinted by permission from the *Journal* of the American Association of University Women, January, 1959.

● *Panorama*

California Harrison Brown, Professor of Geochemistry at the California Institute of Technology, utters a chilling thought in an article appearing in *Horizon*. Civilized man, he says, is nearing the point where he will be completely dependent, for his own survival, on the smooth functioning of his machines. At the same time, the global supplies of coal, oil and other fossil fuels are nearing exhaustion. When they are gone, the machines will have to run on water power, atomic energy and solar energy. *Then,* should a catastrophe disrupt the smooth operation of those machines, their wheels would never turn again. If disaster strikes, he says, there could be no reconstruction, for the "easily available mineral resources — the building blocks of the Industrial Revolution — will not be there for man to use. Without them, it seems doubtful that we shall ever again be able to lift ourselves above the agrarian level of existence."

New Hampshire You get what you expect from a student, says Dr. Edward D. Eddy Jr., Vice President and Provost of the University of New Hampshire. Demand high achievement and it will be given. Make no demands and, like water, all will fall to the lowest level. Dr. Eddy conducted a yearlong study of college influence on student character for the American Council on Education, and found that learning and character-building go hand in hand. "The conditions conducive to the development of character are in many ways the same ones which are conducive to good teaching and sound learning . . . The two are inextricably interwoven in the truly educated man."

Ohio "A combination of hundreds of things he has done for the youngsters in this community during his years of service" earned Howard G. Schrop an unusual honor recently. Mr. Schrop has been a custodian and chief of maintenance of the Springfield Township School Board for 27 years. Now the board and the town have given public recognition of his services. They named the new junior high school after him, and his name will be carved in stone over the front door.

Wisconsin "I feel better, though the rough cough and hiccough plough me through." This, says Robert W. Davis, a Milwaukee engineer, is probably the worst example of inconsistent spelling in the English language. In a new book called *Thoroly Fonetik Spelling* (60 pp., $2.75. The Comet Press, 200 Varick St., New York 14) he urges that we banish this and other inconsistencies from the language forever. He describes a plan he has for dropping four letters from the alphabet, borrowing seven letters from the Greek, and with the help of a semicolon making up a new alphabet from which words would be spelled as they sound. The way things are now, he complains, it's no wonder children have as much trouble learning to read and write as they do.

New Classroom Material

PHYSICS COURSE ON FILM . . . for high school is *The Complete Course in Introductory Physics* taught by Dr. Harvey E. White. Covers mechanics, properties of matter, heat, sound, optics, electricity and magnetism, atomic and nuclear physics, electronics and quantum optics. Consists of 162 sessions in five-day format, three half-hour lectures and 2 half-hour labs. Four introductory lectures, 3 specials (slide rule, algebra, trigonometry). From Encyclopaedia Britannica Films, Inc., 1150 Wilmette Ave., Wilmette, Ill. Color $26,000; b/w $13,000.

SPANISH POETRY AND DRAMA . . . are presented in a record series. Poems by Manrique, Darío, Diego, Pemán and de Castro. Plays by de la Barca, Pemán, Rubio and Iriarte. Production directed by Jose Lopez Rubio in Madrid. Hifi, various speeds. From Language Training Aids, Language Center, Boyds, Md. Poetry on 45 rpm, $2.98 ea; plays 33-1/3 rpm, price range from $6.95 to $13.90. Apply.

RAIL TRANSPORTATION TEACHING AIDS . . . are listed in a free catalog. Teacher's manuals, wall charts, photos and display materials, cartoon narrative folders, bibliographies, etc., for all grade levels. Excellent materials, well presented. Catalog from School and College Service, Assn. of American Railroads, Transportation Bldg., Washington 6, D. C. Request on school stationery.

DATA ON SUBMARINES . . . is provided in *The Complete Book of Submarines* by Comdr. C. W. Rush, USN, W. C. Chambliss and H. J. Gimpel. Gives the entire history of submersibles from 1620 to today's Nautilus. Principles of operation, construction, propulsion of all types, armament and personnel are covered. Profusely illustrated with photos and drawings. Excellent reference for history and social studies classes. From World Publishing Co., 2231 W. 110th, Cleveland 2. 159pp. $4.95.

THE STORY OF THE NUTCRACKER SUITE . . . has been adapted and illustrated by Warren Chappel, in *The Nutcracker*. For the primary grades, this has appeal for any age. Based on the Dumas *pere* version of the Hoffman story. Charming illustrations include musical excerpts. Borzoi Book from Alfred A. Knopf, 501 Madison Ave., New York 22. Unpaged. $2.95.

A SCIENCE FILMSTRIP SERIES . . . is for primary grades. *Simple Machines Help Us Work* covers six machines: levers, pulleys, wedges, wheels and axles, ramps and screws. Easily understood, these six filmstrips give a basis for comprehension of more complicated machines. From Jam Handy Organization, 2821 E. Grand Blvd., Detroit 11. Color. Complete series $28.50. Single strips $4.95 each.

HOW TO MAKE IT . . . a handbook on preparing cheap audio-visual materials is *A Guide for Use with the Indiana University Film Series in the Area of Preparation and Use of Audio-Visual Instructional Materials*. Tells how to mount, letter, frame, display; prepare slides, Diazo printing, photos; how to edit and splice tape recordings. Lists correlated films and sources of materials and equipment. Excellent manual. From Indiana University Audio-Visual Center, Bloomington, Ind. Illus. Unpaged. $2.00.